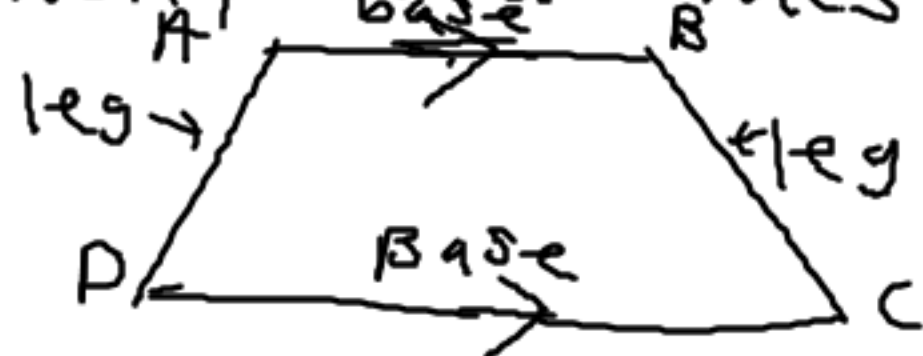
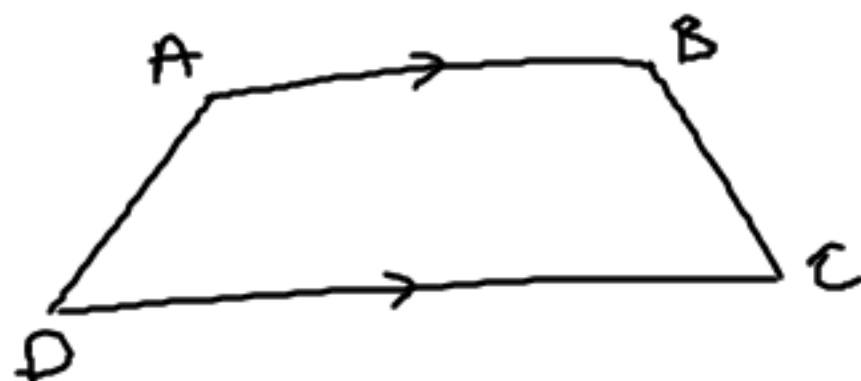


## 6.5 Trapezoids

Trapezoid: a quadrilateral with exactly one pair of // sides.

parallel sides  $\rightarrow$  bases  
non parallel sides  $\rightarrow$  legs



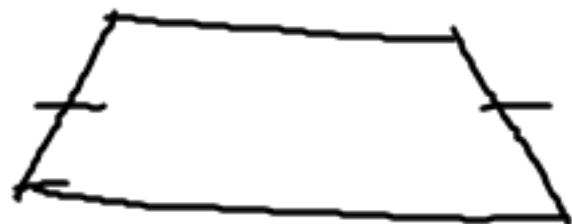


$\angle A$  &  $\angle B$  pair of  
base  $\angle$ 's

$\angle D$  &  $\angle C$  pair of  
base  $\angle$ 's.

Isosceles Trapezoid:

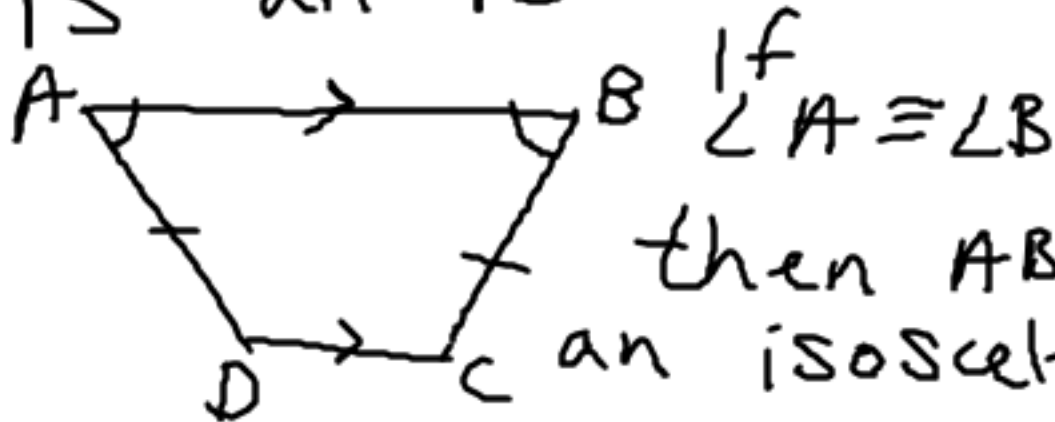
A trapezoid with  $\cong$  legs.



TH 6.12 If a trapezoid is isosceles then each pair of base  $\angle$ 's are  $\cong$ .



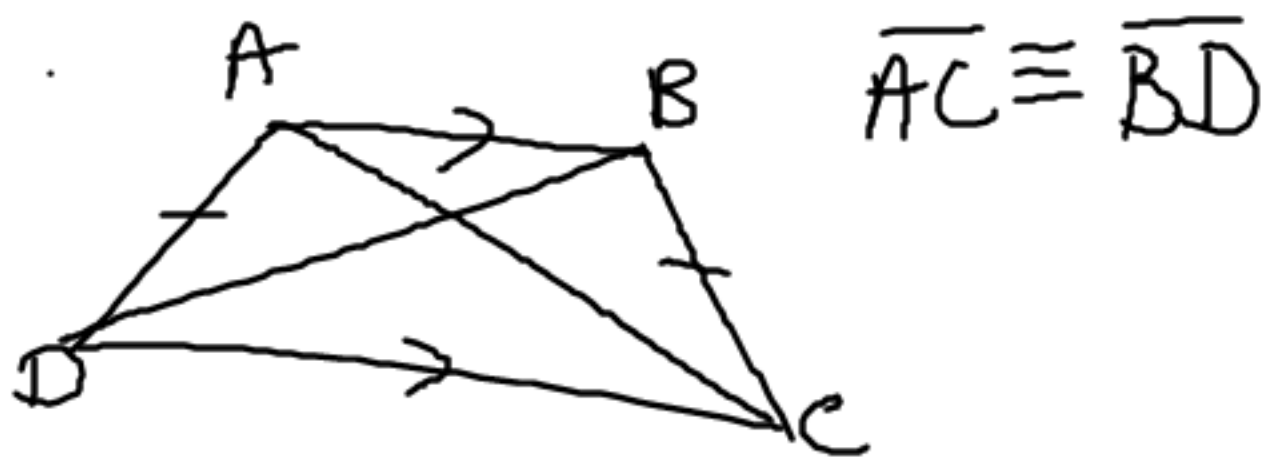
TH 6.13 If a trapezoid has  
a pair of  $\cong$  base  $\angle$ 's then  
it is an isosceles trapezoid.



If  $\angle A \cong \angle B$

then ABCD is  
an isosceles trap.

TH 6.14 The diagonals in  
an isosceles trapezoid are  
 $\cong$ .

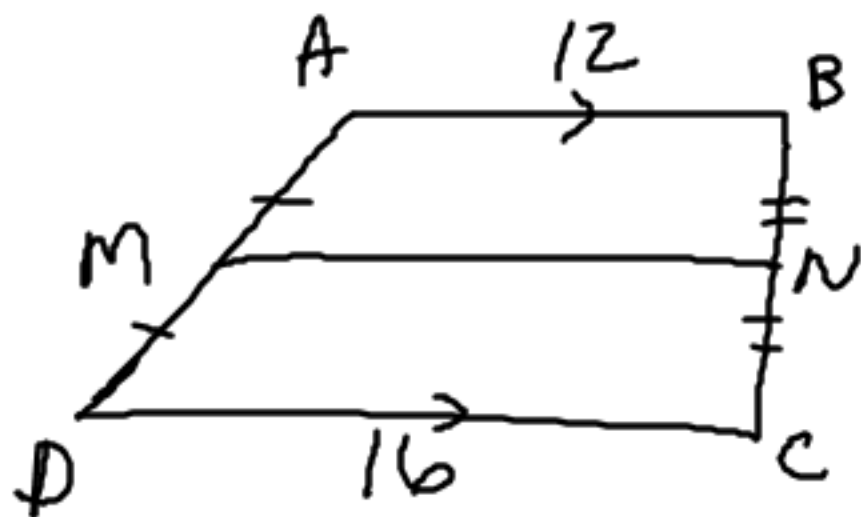


# Midsegment of a trapezoid



$$\overline{BM} \cong \overline{AM}$$

$$\overline{CN} \cong \overline{DN}$$



$\overline{MN}$  is the midsegment

$$MN = \frac{1}{2}(AB + DC)$$